WE CLAIM:

1. A compound comprising the formula:

(I)

$$\begin{array}{c|c}
R_4 & & \\
Z & & R_5 & \\
R_6 & & \\
\end{array}$$

wherein:

 R_1 and R_2 are individually selected from the group consisting of H, CH₃, C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p$ -D;

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted, straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls; p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X₂, -CN, -OR₁₉, NHR₂₀,

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wherein:

 R_{17} is H, CH_3 or X_3 ;

R₁₈ is H, a C₁₋₄ alkyl or benzyl;

R₁₉ is H, a C₁₋₄ alkyl, X₂ or benzyl;

 R_{20} is H, a C_{1-10} alkyl or $-C(O)R_{21}$,

wherein R_{21} is H, a C_{1-4} alkyl or alkoxy, t-butoxy or benzyloxy;

X₂ and X₃ are independently selected halogens;

 R_3 is H, CH_3 , or $-C(=O)(CR_{15}R_{16})_w$ -D,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R₁ and R₂.

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J is O, NH or S;

R₄, R₅, and R₆ are independently selected from the group consisting of H, CH₃, C₂-C₁₀ alkyls, C₂-C₁₀ alkenyls or C₂-C₁₀ alkynyls, each of which can be substituted or unsubstituted; straight or branched; C₂-C₁₀ heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

Z is NR_7R_8 or

wherein R_7 is selected from among H, CH_3 , C_2 - C_{10} alkyls, alkenyls or alkynyls which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls, or $-(CR_{23}R_{24})_q$ -aryl, or R_8 ,

wherein R_{23} and R_{24} are independently selected from the group consisting of H and C_1 - C_{10} alkyls;

q is an integer from 1 to about 6;

 R_8 is selected from the group consisting of $(CR_9R_{10})_n$ -NR₂₂-R₁₁, $(CR_9R_{10})_n$ -CH₂-NHC(O)R₂₆ and $(CR_9R_{10})_n$ -CH₂-E;

wherein R_9 and R_{10} are independently selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkynyls and halogens;

R₂₆ is H, CH₃, O-t-butyl, O-benzyl;

E is OH, SH or O-C(O) R_{27} ,

wherein R₂₇ is a C₁-C₆ alkyl, benzyl or phenyl;

 R_{22} is H or CH_3 ;

n is a positive integer from 1 to about 10;

 R_{11} is H or -L-B,

25 wherein L is a linker; and

B is a first active moiety, reactive group moiety or a polymer;

 R_{25} is H, -C(O)- R_{28} or -C(O)-O- R_{29} ,

wherein R_{28} is a $C_1.C_6$ alkyl or benzyl; and R_{29} is CH_3 , t-butyl or benzyl;

 X_1 is O, NH, or S; and

A is H or a second active moiety.

2. The compound of claim 1, wherein Z is NR_7R_8 .

- 3. The compound of claim 2, wherein R_8 is $-CH_2-CH_2-NH_2$.
- 4. The compound of claim 2, wherein R_8 is $(CR_9R_{10})_n$ - NR_{22} - R_{11} .
- 5 5. The compound of claim 1, wherein L-B comprises a maleimidyl or an N-hydroxysuccinimidyl group.
 - 6. The compound of claim 4, wherein R_{11} comprises a polyalkylene oxide residue.

- 7. The compound of claim 6, wherein said polyalkylene oxide residue is a polyethylene glycol.
- 8. The compound of claim 7, wherein said polyethylene glycol has a number average
 molecular weight of from about 2,000 to about 200,000 daltons.
 - 9. The compound of claim 4, wherein R₁₁ comprises a member of the group consisting of collagen, glycosaminoglycan, poly(-aspartic acid), poly(-L-lysine), poly(-lactic acid), poly-N-vinylpyrolidone and copolymers of poly(-lactic acid) and poly(-glycolic acid).
 - 10. The compound of claim 1, wherein R₁, R₂, R₃, R₄, R₅, and R₆ are independently selected from the group consisting of H, CH₃ and CH₃CH₂.
- The compound of claim 4, wherein R_7 is CH_3CH_2 ; R_8 is $-(CR_9R_{10})_n$ - NR_{22} - R_{11} ; and R_9 and R_{10} are H; n is 2; and X_1 is O, S or NH.
 - 12. The compound of claim 4, wherein R_7 is CH_3CH_2 ; R_8 is $-(CR_9R_{10})_n$ - NR_{22} - R_{11} and R_9 and R_{10} are H.

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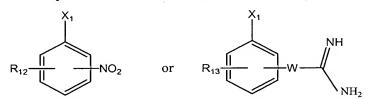
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- 13. The compound of claim 1, wherein said second active moiety comprises a member of the group consisting of X_1A_1 or X_1A_2 wherein
- X_1A_1 is a substrate or substrate analog selected from the group consisting of amino acids, amino acid derivatives, peptides, peptide derivatives and substrates or substrate

analogs for serine proteases, cysteine proteases, esterases, lipases, or other enzymes containing an active site serine or cysteine; and

 X_1A_2 is an enzyme.

5 14. The compound of claim 13, wherein X_1A_1 is a moiety of the formula



wherein R_{12} and R_{13} are independently H or electron donating or electron withdrawing groups and W is CH or N.

- 10 15. The compound of claim 13, wherein A₂ is an enzyme selected from the group consisting of serine proteases, cysteine proteases, esterases, lipases and enzymes containing an active-site serine or cysteine.
- 16. The compound of claim 14, wherein J is O, R₂ is H, R₇ is CH₃CH₂; R₈ is -(CR₉R₁₀)_n-NR₂₂-R₁₁, R₉ and R₁₀ are H, and n is 2.
 - 17. The compound of claim 15, wherein X_1A_2 is an enzyme having an active-site serine or cysteine.
- 20 18. The compound of claim 11, wherein X_1A_2 is a blood coagulation factor.
 - 19. The compound of claim 11, wherein the enzyme is selected from the group consisting of plasmins, urokinases, and tissue plasminogen activators.
- 25 20. The compound of claim 13, wherein X_1A_1 is an amino acid, peptide, or substrate or substrate analog capable of interacting with an enzyme.
 - 21. The compound of claim 20, wherein said amino acid is selected from the group consisting of isoleucine, phenylalanine, tyrosine, lysine, arginine, aspartate, glutamate, glutamine and asparagine.

22. A compound of claim 1 selected from the group consisting of:

$$\begin{array}{c|c}
R_4 & R_2 & O \\
& R_1 & R_1
\end{array}$$

$$\begin{array}{c|c}
R_2 & O \\
& R_1
\end{array}$$

$$\begin{array}{c|c}
R_2 & O \\
& R_1
\end{array}$$

$$\begin{array}{c|c}
 & & & & & \\
R_4 & & & & & \\
R_5 & & & & \\
R_5 & & & & \\
R_6 & & & & \\
R_1 & & & & \\
R_2 & & & & \\
R_1 & & & & \\
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R_1$$

wherein

PEG is a polyethylene glycol having a molecular weight of from about 2,000 to about 200,000; and

mAb is a monoclonal antibody.

- 23. The compound of claim 22, wherein said monoclonal antibody is trastuzumab.
- 10 24. The compound of claim 1, wherein L-B comprises a maleimidyl or an N-hydroxysuccinimidyl group.
 - 25. A pharmaceutically acceptable salt of the compound of claim 1.

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26. A method of treatment, comprising: administering to a mammal in need of such treatment an effective amount of a

- 5 27. The method of claim 26, further comprising exposing the compound of claim 1 to an energy source after administration to said mammal.
 - 28. The method of claim 27, wherein the energy source is white light having a wavelength in the range from 340 to 700 nm.
 - 29. The method of claim 27, wherein the energy source is white light having a wavelength in the range from 350- 420 nm.
- The method of claim 27, wherein the energy source is selected from the group consisting of microwave, ultrasound, radio energy, gamma radiation, radioactivity, ultraviolet light and infrared light.
 - 31. A method of preparing a conjugate, comprising: reacting a compound of Formula (IV)

compound of claim 1, where B is a first active moiety.

$$R_4$$
 R_7
 R_5
 R_6
 R_{10}
 R_{9}
 R_{10}
 R_{22}
 R_{10}
 R_{22}
 R_{10}
 R_{10}

20 (IV)

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wherein:

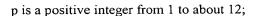
 R_1 and R_2 are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or

25 C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p$ -D

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkyls or C_2 - C_{10} heteroalkyls;

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D is selected from among -SH, -OH, X₂, -CN, -OR₁₉, NHR₂₀,

$$CH_2$$
 CH_2 and CR_{17} , CR_{18}

wherein:

 R_{17} is H, a CH₃ or X_3 ;

R₁₈ is H, a C₁₋₄ alkyl or benzyl;

R₁₉ is H, a C₁₋₄ alkyl, X₂ or benzyl;

 R_{20} is H, a C_{1-10} alkyl or -C(O) R_{21}

wherein R_{21} is H, a C_{1-4} alkyl or alkoxy, t-butoxy or benzyloxy;

X₂ and X₃ are independently selected halogens;

 R_3 is H, CH₃, or -C(=O)(CR₁₅R₁₆)_w-D,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R_1 and R_2 . J is O, NH or S;

15 R₄, R₅ and R₆ independently selected from the group consisting of H, CH₃, C₂-C₁₀ alkyls, C₂-C₁₀ alkenyls or C₂-C₁₀ alkynyls, each of which can be substituted or unsubstituted; straight or branched; C₂-C₁₀ heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

R₇ is selected from among H, CH₃ and C₂-C₁₀ alkyls;

 X_1 is O, NH, or S; and

A is H or a second active moiety;

with a compound of the Formula (V):

(V) L_1 - B_1

wherein L_1 is a moiety containing a functional group capable of reacting with the NHR₂₂ of Formula (IV);

and B_1 is selected from the group consisting of polymers, biologically active materials and polymeric supports.